CLAIMS

We claim:

1. A focal plane plate for a high resolution camera with light-sensitive semiconductor sensors comprising:

housings for the light sensitive semiconductor sensors, said housings having a form; and

adjustment elements arranged on the focal plane plate at arrangement locations of said housings, said adjustment elements having a form complementary to the form of said housings.

2. The focal plane plate in accordance with claim 1, wherein said adjustment elements comprise one from a group consisting of parallelepipedal islands and inserts.

3. The focal plane plate in accordance with claim 2, further comprising cutouts for releasably receiving said inserts.

4. The focal plane plate in accordance with claim 3, wherein said housings are permanently connected to the complementarily adapted adjustment elements.

5. The focal plane plate in accordance with claim 3, wherein said housings and associated inserts are integrally formed.

6. The focal plane plate in accordance with claim 3, further comprising adjustment webs arranged in said cutouts in the focal plane plate.

7. The focal plane plate in accordance with claim 3, further comprising focal plane plate holes adapted to receive heat pipes for passing coolant therethrough.

8. The focal plane plate in accordance with claim 7, wherein said focal plne plate holes are arranged to pass through one of said islands and said cutouts, said inserts further comprising insert holes, wherein said focal plate holes form a duct with said insert holes.

9. The focal plane plate in accordance with claim 1, wherein the focal plane plate and said adjustment elements comprise a expansion compatible material with respect to said housings.

10. The focal plane plate in accordance with claim 9, wherein said adjustment elements comprise a first material and the focal plane plate comprises a second material, said first material having a greater thermal conductivity than said second material.

11. The focal plane plate in accordance with claim 9, wherein said housings, said adjustment elements and the focal plane plate are composed of the same material.

12. The focal plane plate in accordance with claim 9, wherein said housings, said adjustment elements and the focal plane plate are composed of aluminum nitride ceramic.

13. The focal plane plate in accordance with claim 1, wherein the light-sensitive semiconductor sensors comprise contact pins and the focal plane plate is plated in a region of said contact pins.

14. The focal plane plate in accordance with claim 13, wherein said inserts further comprise side walls having conductor tracks electrically connectable to said contact pins, and separate contact pins for extending a length of said contact pins.

15. The focal plane plate in accordance with claim 14, wherein said conductor tracks comprise silver-palladium paste printed onto said inserts.

16. The focal plane plate in accordance with claim 1, further comprising a temperature sensor arranged on said adjustment elements.

17. The focal plane plate in accordance with claim 15, wherein said inserts further comprise a top side having chamfered edges.

18. The focal plane plate in accordance with claim 14, wherein said cutouts further comprise additional cutouts in a region of said contact pins, said additional cutouts comprising plated-through holes.

19. The focal plane plate in accordance with claim 1, wherein the light-sensitive semiconductor sensors comprise electronic circuitry arranged on an underside of the focal plane plate.

20. A method for adjusting housed light-sensitive semiconductor sensors on a focal plane plate comprising the steps of:

measuring a position of a surface of the light-sensitive semiconductor sensors with respect to an underside of the housings;

forming a surface of adjustment elements such that the surface is complementarily shaped with respect to housing forms of the light-sensitive semiconductor sensors; and

connecting the light-sensitive semiconductor sensors to the formed adjustment elements, wherein pixels of the light-sensitive semiconductor sensors lie substantially in one plane when fitted onto said adjustment elements.